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ASSOCIATION

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EDITORIAL

LESSONS TO BE LEARNED

Of course there were mistakes at Tunbridge Wells for the Third Annual Mushroom Exhibition. Of course there was room for improvement—what worthwhile show of any size is faultless? But, by and large, this year's annual effort was a success even though there were lessons to be learned.

What then is the greatest lesson taught this year at Tunbridge Wells? The value of publicity for sure, for wasn't Raymond Thompson, Chairman of the MGA Publicity Sub-Committee, able to state at the annual meeting that after even the limited publicity campaign at Tunbridge Wells local consumption had been driven from 300 lb. per week to 3,000 lb.!

True, those who argue that publicity is a waste of time will immediately turn and say that this increase in public interest was due to the fact that mushrooms were available at a shilling a quarter lb. and, up to a point, they are right, but only up to a point. Surely this spectacular achievement—for it was no less than that—was only possible because the general public like mushrooms and need only a little persuasion to take them regularly throughout the year.

No matter what the theorists may say, most of the good things of life are pretty dear these days but, as *The Grower* rightly pointed out in a recent issue, there is no real and valid reason why mushroom growers in this country should be on the defensive about the price the public pays for mushrooms, for it has no rival in the vegetable world.

Clearly Tunbridge Wells demonstrated that the public wants mushrooms and that it likes mushrooms and it is up to growers to provide them. This, it seems, is a great opportunity and certainly is one which should not be missed.

To G. W. Baker, Vice-Chairman of the MGA, must go much of the credit for the success of this real foray into publicity for, if ever he got his teeth into a problem, this was the one. To R. S. Francis too, of Poult House Gardens, who, at very short notice, organised the Tunbridge Wells end of the problem. The thanks of the whole industry are due to these, to the retailers who co-operated so splendidly, and last but by no means least, to those growers who, at some financial sacrifice, agreed to supply the shops daily, some growers even coming in at a day's notice, when the demand rocketed so emphatically. Big things have little beginnings and, who knows, Tunbridge Wells, 1954, may well prove to be a milestone, and a most notable one at that, for the Mushroom Industry of this country which, never mind what our critics say to the contrary is, by and large, represented by the MGA, an organisation governed by growers in the interests of growers, with the well-being of growers and the industry as a whole as its only object.

W.R.A.

LOOKING BACK

Only disappointment of the 1954 Tunbridge Wells annual gathering was the comparatively small attendance at the annual general meeting, a rather surprising thing in view of the fact that the annual lunch and the Chairman's Reception immediately before attracted record attendances.

On the opening day most trade stands appeared to keep pretty busy with enquirers and certainly the reception in the evening given by the Mayor and Corporation of Tunbridge Wells was an outstanding success and did not break up until well after the appointed time. This reception was attended by over 200 members and friends and members of the Corporation mixed freely with the guests.

The Mayor (Ald. J. A. McNab, M.B.E.), made a short speech of welcome and afterwards the Mayoress presented the prize awards. Capt. G. P. Lawrence, MGA Chairman, then introduced Mrs. Lawrence, who expressed thanks to the Mayor, the Mayoress and the Corporation.

A full programme on the second day kept members pretty busy all through.

The annual meeting, the Chairman's Reception and the Annual Lunch were followed in the afternoon by a Brains Trust, over which Capt. Lawrence presided and some former chairmen of the MGA formed the panel.

The customary animated discussion on the merits of the tray system as opposed to the shelf system did, as always, promote some very lively exchanges. It was, perhaps, a little unfortunate that the questions asked and answered were somewhat limited owing to the fact that some growers in the body of the hall appeared rather keen to air their views on the merits of the particular growing methods and systems which they adopted, whereas quite a number of other growers were anxious to get some of the "bigger boys" to answer some particularly knotty points.

Without any question, the visit of attractive Anne Cullen, who plays the part of "Carol Grey" in that ever popular radio programme "The Archers," did much to attract the general public into the Exhibition on the second day.

This added publicity aid, together with that of the retailers' competition, both new departures for this annual event, were more than justified by the results.

"Commercial Mushroom Growing" by M. H. PINKERTON

Matthew Pinkerton, one of the most colourful characters in the Mushroom Industry in the British Isles, has written a 223 page book on commercial mushroom growing.

A prospectus of the book is enclosed with this issue of the Bulletin. The book, available from 18th November, from the MGA office, is priced 21/- (postage 6d. extra).

"Commercial Mushroom Growing" will be reviewed in our December issue by Dr. H. H. Glasscock, Advisory Plant Pathologist to the NAAS, at Wye, Kent.

SUBMERGED CULTURE OF MYCELIUM OF VARIOUS SPECIES OF MUSHROOMS

By Dr. R. L. EDWARDS

A recent article* by T. F. Sugihara and the late H. Humfeld gives further information on this process, first described by Humfeld in 1948.

The method was devised to produce a mushroom soup by growing mushroom mycelium in huge tanks of a suitable liquid medium through which air was blown continuously in fine bubbles. Similar processes are used to produce bakers' yeast and penicillin on a large scale.

This latest article describes experiments with 23 strains of 20 species of edible fungi, including two white and a cream variety of the cultivated mushroom.

Two types of growth were obtained, pellet-like colonies which grew rather slowly, and a rapid growth of mycelium dispersed through the culture medium, with the "secondary spores" previously described by Kligman.

The pellet-like form of growth was shown by *Agaricus rodmanii*, closely related to the common field mushroom; Chanterelle (*Cantharellus cibarius*); Parasol Mushroom (*Lepiota procera*); Morels (2 *Morchella* spp.) among others, and the dispersed form by one cream and two white varieties of the cultivated mushroom; Shaggy Cap (*Coprinus comatus*); Wood Blewit (*Tricholoma nudum*); Honey Fungus (*Armillaria mellea*); Shaggy Parasol (*Lepiota rachodes*).

It is stated that "the main problem at present is the development in submerged culturing of 'mushroom flavour' of sufficient intensity and consumer acceptability." "The more favourable comments were that the samples were nut-like, cheese-like and pleasant." (But apparently not very mushroom-like!) Apart from the cultivated mushroom only the Shaggy Parasol had a pleasant flavour when grown in this way.

There is reason to believe that several leading British food manufacturers were interested enough to experiment with this process when it was first reported six years ago, but there appear to have been no commercial developments in this country.

Costs

The yield of dry mycelium varies between 20—30% and 55—60% of the glucose in the original culture medium, according to the species and variety used. This is of the same order as the yield of bakers yeast from cane sugar in molasses, and the wholesale price of bakers yeast is about ninepence a pound in moist form with about 27% dry matter, equivalent to 3/- per lb. of dry yeast.

It is unlikely that mushroom mycelium could be produced more cheaply than this and the cost might be considerably higher. For comparison, mushrooms have 10% of dry matter and at 3/- per lb. fresh, cost 30/- per lb. of dry mushroom tissue.

*Submerged Culture of the Mycelium of Various Species of Mushroom. T. F. Sugihara and H. Humfeld (1954), Applied Microbiology, 2, 170.

The production of Morels (*Morchella hortensis*) in pellet form has also been reported recently from Syracuse University, but no details of yields or costs were given.

The submerged culture method could obviously be very much cheaper than ordinary mushroom growing, but of course the product is only suitable for use in soup or as a liquid or powdered flavouring. Even if it were completely successful, which is far from the case at present, it would only compete in a small part of the present British market for mushrooms.



MGA GOES TO TOWN

As from Monday, 15th November, the MGA Office will be located at the NFU Headquarters and communications should be addressed to: The Secretary, Mushroom Growers' Association, 45 Bedford Square, London, W.C.1. (Tel. : Museum 7525-9.)

In view of this move, the Secretary hopes that members will keep their correspondence to a minimum for a few days before and after 15th November, *Please!*

DEATH OF BRIGADIER NICHOLS

News has been received of the death of Brig. J. S. Nichols, D.S.O., M.C., a valued member of the MGA for many years, and whose last contribution to this Bulletin appeared in September. He held a controlling interest in two farms. His sister, Capt. R. M. Nichols, a WRAC Officer, is to manage the farms.

NO SAMPLES, PLEASE!

As all essential equipment has now been packed away, no more soil samples, compost, etc., should be sent to the MRA at Yaxley.

TUNBRIDGE WELLS CARTOONS

Originals in colour of the individual caricatures drawn by CAPTAIN MACHIN, D.F.C., of Quoins, Dallington, Heathfield, Sussex, may be purchased from him for One Guinea each.

Copies on stiff white board of the complete two-page set in black and white are obtainable from the MGA Secretary for 2/6 each.

AT THE FOOD FAIR

The Essex and Kent branches of the NFU were courageous in taking stand space at the Food Fair at Olympia in September, and the MGA did its best to support the venture. It was an astonishing success.

As J.W. put it in the *Essex Farmers' Journal*: It seemed an oasis of green. It was cool and quiet and attractive in a way that was more British than any other part of the British Food Fair. It was fresh and alive amid so much that was "canned," literally and figuratively. Its fruits and vegetables, its carnations and chrysanthemums, its mushrooms and trailing greenery, its artistic display and the general setting of greenness and whiteness were good to look upon One is, of course, left with the thought: "Why only Essex and Kent, and why only horticulture, at a British Food Fair?"

The usual totally-inadequate support was given to the MGA Publicity Sub-Committee's enterprise, a meagre handful attempting to man the mushroom corner for the eleven days. Admittedly time and money were against us; but what about 1956? Plans should be made now for a Show of this magnitude and importance.

Thousands of mushroom *Recipes* and *Ways of a Mushroom Grower* were distributed; and an amusing highlight of our effort was the manhandling of a 3 × 2 ft. tray covered with "flats" through a dense crowd of several thousand visitors, between Stand and Store, accompanied by a continuous murmur of "Oh look—mushrooms!"

F.C.A.



A general view of the Assembly Hall, Tunbridge Wells, with the Mushroom Industry Exhibition competition classes on the stage in the background. The Exhibition had just opened its doors when this picture was taken. This and the other pictures are by John Topham of Sidcup.

THE CULTIVATED MUSHROOM

10—CYTOLOGY (*continued*)

By ANDRÉ SARAZIN

4. The nucleus and its evolution

Each mushroom cell contains one or more nuclei. The importance of these ever present bodies which are generated exclusively from pre-existing nuclei is recognised. Their chemical composition is characteristic, *viz.*, a permanent protein base (derived from thymo-nucleic acid) which can be demonstrated by means of a special staining reaction known as the Feulgen nuclear stain.

The results of modern genetical research have revealed that they are the bearers of hereditary factors, factors which are located in the chromosomes. These chromosomes arise automatically and are constant in number. They originate as a result of the delimitation of the chromatin material of the nuclei at each nuclear division or mitosis.

In the following account the nuclear evolution of the Cultivated Mushroom in its various phases of development will be surveyed. For this to be feasible it has been necessary to assume that the reader is already familiar with cytological techniques and the results obtained by them; in other words that he is acquainted with nuclear structure and with the types of nuclear division, namely, somatic mitosis and meiosis (heterotypic reduction division followed by homotypic mitosis).

This review will include quotations from the works of the following authors:—Sass (1929-1936), Hirmer (1920), Colson (1935), Klioushnikova (1938), Lambert (1938), and, in particular, Kligman (1943) and in addition my own observations both published and unpublished (Sarazin, 1938).

Mycelium

When the basidiospore germinates the four nuclei which it contains migrate into the germ-tube which increases progressively in length (figs. 45 and 46). When germination takes place through two germ-pores each vesicle receives a pair of nuclei. Likewise, when germination takes place through a single pore and the germ-tube undergoes forked branching the two pairs of nuclei migrate respectively to the tips of the branches of the fork. Invariably, once the two nuclei of each pair are distributed in the germ-tube they cease to be interdependent and lose their tendency to remain in pairs. The germ-tube elongates and branches rapidly; the nuclei do not divide simultaneously and, in the coenocytic plasma thus formed, cell-partions are laid down, thereby isolating heterocaryotic multinuclear lengths of hypha. These hyphal lengths multiply by apical growth and by the formation of branches. Anastomoses take place between the hyphae of multispore germinating



Fig. 45. Photomicrograph x 2100.
Two nuclei appear in the germ vesicle.



Fig. 46. Photomicrograph x 2100.
Four nuclei have passed into the germ-tube from the basidiospore.

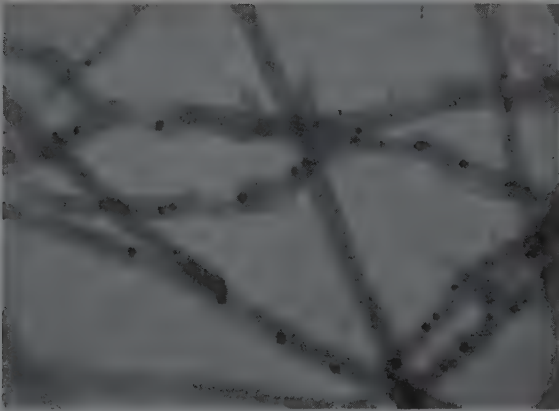


Fig. 47. Photomicrograph x 2100. Nuclei in the hyphae.

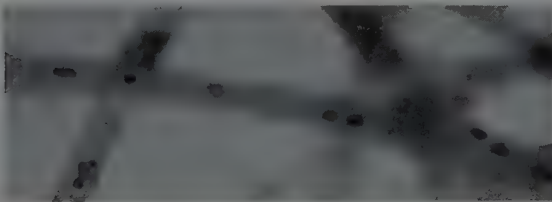


Fig. 48. Photomicrograph x 2100.

systems thus enabling the exchange of nuclei to occur between these hyphae. Each cell of the mycelium which is thus formed contains a rather large but variable number of nuclei which, when subjected to the action of fixatives and appropriate stains (Helly-haematoxylin, Nawashima gentian-violet, etc.,) show, in well differentiated preparations, a strongly siderophilic nucleolus and an extremely delicate chromatin network through a faintly-staining nuclear membrane. More often these same stains reveal only a spherical siderophilic body surrounded by a clear areola (fig. 47).

The nuclei in the mycelium are situated here and there along the cells in varying numbers; for instance, along three successive cells of a

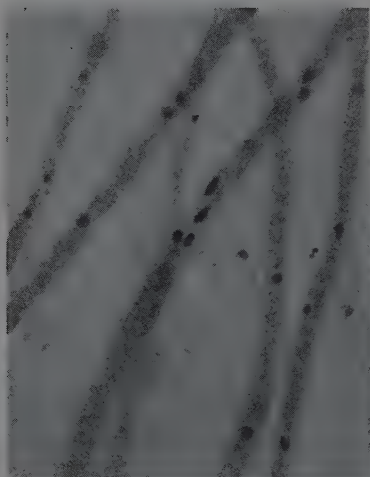


Fig. 49. Photomicrograph x 2100.

hypha, I counted 27, 8 and 13 respectively. In apical cells, as observed by Kligman, the nuclei show no tendency to form pairs and their number is also very variable. On account of the minuteness of the nuclei Kligman was unable to observe the conventional mitotic figures, viz., during division the chromatin becomes extended and divided into two rounded bodies (fig. 48 and 49) which are the chromatin masses of the daughter nuclei. In delicately prepared and exceptionally clear preparations I have been able to observe the various stages of mitosis, viz., a spindle with granules, the chromosomes situated on it, as well as a nucleolus which persists over a rather lengthy

period (figs. 50 and 51). The axis of the nuclear division occurs always parallel to the long axis of the cell. Kligman has observed that the nuclei do not migrate after division but remain in situ in the cell and that usually the nuclei of the subapical cells cease to divide unless a branch is developed at their level. Kligman reached similar conclusions when studying mycelium derived from a single spore. They are substantiated by my own observations and are: that the nuclei are completely independent of one another their division not being of the conjugate type, and they are not associated with one another in those formations known as dikaryons which characterise the fertile mycelium of other basidiomycetes.



Fig. 50. Photomicrograph x 2100.
Mitosis in the apical cell.



Fig. 51. Photomicrograph x 2100. Nuclear division showing granules or chromosomes distributed on the spindle.

The photomicrographs are the property of the Author. The translation is by Dr. C. J. La Touche.

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BRIDGE OF ALLAN FARM WALK

Although Bridge of Allan has had less rainfall than many parts of Britain this summer, there has been little pleasant weather since May, and the first Scottish Area Meeting was indeed "fortunate in securing the services of" a really fine September afternoon, on Saturday, 4th September.

Over 30 visitors ("Almost 1 guest per sq. ft.", according to Mr. Galbraith's remark!) assembled at Albethy from points as widely separated as Aberdeen and Sussex, and were there shown over the outdoor frame-growing plant by the owner and his wife and daughter. Despite a warning that this outfit was largely derelict and about to be entirely re-built on different lines, these electrically heated "museum pieces," as Mr. Galbraith called them, evoked more questions than any other

items on view, probably because they formed the background to the several unorthodox practices in use, and showed the possibility of producing good crops with less than one cubic foot of air per sq. ft. of bed surface. This seeming miracle was simply explained in terms of a steady air-flow produced by sloped surfaces and suitably placed vent slits, operated by sun-heat in summer and warm (not hot) nickle-chrome wires in colder weather. Mr. Galbraith refuted the suggestion that this system was a sort of half-way house between Indoor and Outdoor growing, stating that more, rather than less, control over cultural conditions was obtainable than in ordinary houses. He admitted, however, that upkeep costs were unduly heavy with the present design and exposed site, and that operational work was also costly—and often unpleasant—on his beautiful but breezy hillside, overlooking the Forth Valley and Southern Grampians, from a 1-in-3 gradient.

Some side-line entertainment was provided by a demonstration by a member of the staff of the tray-carrying overhead cableway, powered by a motor mower in its spare time, and also by a similar gravity-operated self-tipping tub system to handle the spent compost. A Heat Room of unconventional tent-like shape, designed to equalise temperatures, also caused some interest.

The senior member present was Mr. G. M. McArthur, of Arbroath, representing the Executive, and about mid-afternoon he suggested that the visitors should abandon their sunny niches in the hill, and proceed to the nearby and newer plant at Edgehill. Here, seven small growing rooms, with Heat Room and Stack Room accommodation, are housed on two floors in a stone and brick building, fibreglass lined. Bed design is here quite orthodox, and the main point of interest was the grouping of the growing rooms around a centrally located “Baxi” hot air plant, with ducting and a “home” designed humidifying device. As at Albethy, all beds are made up by tipping out tray-fulls of spawn-run compost after its three weeks in a heat room, no growing being done in trays.

Time was wearing on, and after a few late-comers had been given a chance to see the outdoor section, the knots of arguing growers were gently but firmly extracted from their hide-outs among dung-heaps and trays, to join their ammonia-satiated ladies in the fresh air, and proceed to Alangrange Hotel for tea.

Ing. Zinojin Janovac, a Yugoslav mushroom-growing member of the MGA, wishes to gain experience in the Tray System. He asks whether any tray grower in Britain would allow him to work here for two or three months without a fee. His address is Zmaj Jovina, 12/1 Novi Sad, FNR Jugoslavia.

THE FRED. ATKINS ALPHABET—M

Malformation. There are many possible causes of malformed or distorted mushrooms, the most notorious being Rose Comb, which we have always associated with oil or oil fumes—though other factors can be responsible.

Manure. Horse manure ten years ago seemed in grave danger of disappearing from the market, and Mushroom Research was launched to find an alternative growing medium. The co-existence of a synthetic formula now imposes a ceiling on manure prices, though few realise it.

Marketing. In Britain, alone in Europe, ripe mushrooms are in demand; but the price even here is below that obtainable for closed cups and buttons, which aren't half as tasty. No wonder we hear that the wild species have a stronger taste. The reason, of course, is that immature mushrooms travel better and stay saleable longer. Rapid deterioration is one of our major problems.

Mat Disease. Let us withhold comment until Miss Gandy and Kew have sorted out these "yellow moulds."

Megaselia albidohalteris. A species of Phorid Fly which is a serious pest in mushroom houses.

Mercuric chloride. This once-popular fungicide is rarely if ever used nowadays. It is corrosive to metals and never was very effective in mushroom houses.

Miastor sp. See *Mycophila*.

Middlebrook. *Requiescat in pace.*

Mites. Get rid of as many as you can, whatever they are—and don't mutter about fast-movers and biological control, please!

Monilia fimicola. We nowadays refer to White Plaster Mould as *Scopulariopsis fimicola*. (Why do some people call it Flour Mould? It only confuses us).

Mummy Disease. A name given to abnormal development and sudden death, characterised in this instance by a sense of grittiness when stalks are trimmed. One is tempted to refer to *Fusarium* as the Father Disease of unexplained phenomena of this nature, and to pun with Wilt and Wood; but this is not the old Diary.

Mushroom. The majority preference to-day seems to be for our cultivated mushroom to be known as *Psalliota hortensis* Cooke.

Mushroom Growers' Association. The "recognised voice" of the Mushroom Industry of Great Britain and Northern Ireland. It baffles me that (a) all growers aren't members, and (b) some pretend the MGA subscription is too high. Where else is there better value for Four Guineas?

Mushroom Research Association. I am also baffled to understand how any grower could seriously ask: What are they doing! or What have

they done? Mark my words: *We shall miss the Yaxley Research Station now it's gone.* There was much to be said for moving down to Sussex (whose growers never had much time for, nor contributed very generously to, mushroom research); but it will no longer be *our* research, under *our* control, in the way it was when there was the MRA.

Myceliophthora spp. See Mat Disease.

Mycogone perniciosa. Out, vile Bubble—and the quicker the better. Mushrooms attacked by this fungus should never be left on the beds. Mites and flies can spread the disease so easily.

Mycophila sp. The Cecid Fly is rarely seen but, according to *Min. of Ag. Bull.* 34 “two species (*Mycophila speyeri* and *Miaster* sp.) have been bred and there are probably others.” It is the larvae which do such fearful damage, of course.

Myriococcum praecox. See Brown Plaster Mould. *Papulaspora byssina* is now preferred.

Myxomycetes. The “slime moulds” are not quite as rare as some textbooks suggest. Kligman says: “Generally only a spot or two appears as a slimy gelatinous mass which creeps over the surface. The slimy mass may extend through the compost and fall down in viscous drops on the bed below.” B. A. Noble associates it with localised fermentation.

Under the heading “In the Public Eye” that lively little publication *The B. & G. Review* gives the MGA a pat on the back, saying:—

IN THE PUBLIC EYE

A sidelight on general publicity for horticulture is provided by a new leaflet and recipes put out by the Mushroom Growers' Association.

The four-page leaflet, written by Mr. Fred. C. Atkins, is a straightforward, simplified description of the grower's task, and enough of the difficulties are touched on as should help the public to realise that retail prices are not all that far away from costs. A most effective single paragraph defines the origin, purpose and scope of the Association's work.

*The recipes are clearly printed on one side of a broadsheet, and are set out so that they can be cut up (one for each month) and pasted in the housewife's recipe book.

The appropriate note is struck by calling each recipe a “mushroom treat,” there is the now-familiar discouragement to peeling mushrooms, and the “pay-off line” has the force of simplicity: “600,000 lb. of mushrooms are eaten each week—are you getting your share?”

*Man responsible for these recipes was Mr. Raymond Thompson, Chairman of the Publicity Sub-Committee.—EDITOR.

ANNUAL MEETING

Discussion on *two day gathering* and on *Publicity*.

Captain G. P. Lawrence (Chairman) presided at the ninth annual meeting of the MGA held in the Council Chamber, Tunbridge Wells, on Thursday, 7th October, at 10 a.m. He was supported by Mr. G. W. Baker (Vice-Chairman), members of the Executive Committee and the Secretary.

Capt. Lawrence expressed regret at the comparatively small attendance and then gave his annual report.

In his report he said:—

At our last A.G.M. the Executive Committee were charged with the task of initiating a scheme for publicity. To obtain the necessary funds it was suggested that the spawn suppliers should be asked to collect a small sum on every carton of spawn sold, and hand over the proceeds to the MGA for publicity. At a meeting with the spawn suppliers, however, agreement could not be reached, largely on account of the element of compulsion that was entailed. The spawn levy was therefore shelved for the time being, and the suggestion of the salesman's levy was then investigated. This proposal whereby a salesman would contribute one farthing per chip on all chips handled, provided that the sender would permit the deduction of another farthing per chip from his returns appeared to have definite possibilities. In the opinion of the Committee, however, there was not enough support forthcoming from members to enable them to go ahead. A return was then made to the spawn levy and again the spawn suppliers could not agree to a compulsory scheme. Finally, however, they agreed that they would undertake to ask their customers for a contribution of one penny per carton on all spawn sold; if this was forthcoming they would remit the whole amount to the MGA for publicity.

Unfortunately, in the end, it was not possible to obtain the co-operation of all the spawn suppliers, but the Committee feel that they have enough support to enable them to go ahead.

The scheme, of course, will not operate as originally contemplated, and the contributions will be voluntary and not in any sense a compulsory levy.

I should like, also, to make it quite plain that in my opinion there was considerable substance in the objections which were raised by the spawn suppliers, and we should be most grateful to them for the co-operation which they have now promised.

As regards publicity, however, the MGA has shown the flag at the Chelsea Flower Show, the Royal Show at Windsor and the Food Fair at Olympia. Many thousands of recipe leaflets were handed out

to the public, and the model farm made by Mr. Allen, commanded very great interest. The fear that we might be encouraging possible entrants to the industry does not, in the opinion of our representatives on the stands, appear to have much substance, in fact, rather the reverse.

A great deal of exploratory work in the field of publicity has been undertaken by our Publicity Sub-Committee under the able and most energetic chairmanship of Mr. Raymond Thompson. I am glad of the opportunity of bringing this to your notice.

The organisation of this, our third Annual Trade Exhibition has been no light task, and our thanks are due to our Vice-Chairman, Mr. Baker, who with Mr. Allen and Mr. Harding of the Executive, have so ably carried out the work.

Area meetings and farm walks have been organised. To judge by the attendances these seem to be popular and will be continued. Our thanks are given to those who have so kindly thrown their farms open for these farm walks.

Our financial position which has, to some extent, suffered from the difficulties of 1953, when we were virtually without a Secretary for four months, is nevertheless not unsound.

That this is so, is very largely due to our Secretary, Winston Alderton. His duties have been many, administrative, accounting, managing, show promoting and for the last half year he has been editing the Bulletin. He has been indefatigable in his efforts, and my only fear, and it is a real one, is that we are grossly overworking him.

To help him in taking over his duties we have been fortunate in having someone at hand who has never spared himself with regard to the affairs of the Association. I refer of course to Mr. F. C. Atkins.

During the year the question of the location of the office of the MGA has had to be considered. In the past it has been on MRA property at Yaxley—in view of the closing of the MRA Research Station it has been a question as to whether it was desirable, or even possible, for the office to remain there. After serious consideration it has been decided to transfer the office to London, where accommodation has been provided in the NFU Headquarters (45 Bedford Square, W.C.1).



Capt. G. P. Lawrence, MGA Chairman, caught in this candid camera shot at Tunbridge Wells.

The change of address will be a matter of regret to many to whom the name of YAXLEY is practically synonymous with the name of the MGA, but the change of address means no change in our Policy which will continue to be, as always, to further the interests of our members.

SECRETARY'S REPORT

In his report, the Secretary stated:—

“ From a membership point of view, 1954 has been a good year, with a record total membership, all fully paid up, of 575, made up of 343 Grower Members (five more than last year) and 232 Honorary Members (compared with 204 in 1953).

During the year your Executive Committee met seven times, rather more than usual. The attendances:—Capt. Lawrence, Mr. Baker, Mr. Allen, Mr. Bleazard, Mr. Cooper, Mr. Harding, Mr. Stewart-Wood and Mr. Thompson were present at all meetings, Mr. Filmer attended six meetings, Mr. McArthur from Scotland (3), Mr. Pointing (3), Mr. Boxall (3), Mr. Darlington (1), Capt. Tweedie (nil) and the late Mr. Sam. Nelson (nil). Both Mr. Pointing and Capt. Tweedie were in ill-health for many months.

The Bulletin continues to play its important part in the affairs of the MGA and increases its widespread distribution, going to members in nearly thirty different countries in addition to the British Isles. Mr. Atkins' help in running this publication has, during the year, been quite invaluable. Advertising support has continued and the Bulletin is pretty well self-supporting, but I do urge members to deal with advertisers and to mention this publication whenever possible.”

An apology was also made by the Secretary for the delay in answering some correspondence.

ACCOUNTS

The Secretary presented the accounts and said: We had a loss, as you will see, on the year of £150, and I am afraid it is simply due to Harrogate. We had that blow and could not recover. In a normal year we will probably do much better and we should lose no money at Tunbridge Wells. I might say we have tried to stop the gaps where the money went out and we have probably done it, due to the Corporation, who have been most kind, and I don't think they could have done more than they have done on the official side. We are most grateful. I think this has been quite a good year under the circumstances.

ELECTION OF OFFICERS

Capt. G. P. Lawrence, Messrs. G. W. Baker, F. L. Filmer, F. C. Atkins and E. A. Gook were elected to the Executive by ballot.

Mr. Middlebrook: What is the proportion of the membership on the Committee now, as related to the counties of England, Scotland, Ireland and Wales? I think we have a very heavy representation from the South of England, but when we have our annual meeting in the South we get a poor attendance at the annual meeting.

MG A STATEMENT OF ACCOUNTS for the year ended 31st AUGUST, 1954

1953 £	Dr.	£	s.	d.	£	s.	d.	Cr.	1953 £
856	To Salaries and Clerical Assistance ..	817	14	10					
260	" Postages, Printing and Stationery ..	277	12	0					
133	" Cost of Reprints and Advertisements ..	2	0	0					1,338
54	" Purchases of Literature ..	137	13	5					160
7	" Subscriptions to Trade Journals ..	8	17	6					1,195
64	" Telephones, Telegrams and Sundry Expenses ..	68	18	1					3
151	" Travelling, Hotel and Entertainment Expenses ..	144	13	5					486
13	" Bank Charges and Cheque Books ..	17	19	2					10
15	" Audit Fees ..	35	14	0					6
3	" Rates and Insurance ..	3	9	10					
122	" Cost of Luncheon (A.G.M.) and Harrogate Exhibition ..	764	13	1					
95	" Less Sale of Tickets, Stand Rents, Donations, &c. ..	422	15	0					
27	" Publicity Expenses ..	132	17	11					
	Less Receipts ..	114	18	9					
42	" Cost of Quarterly Meetings ..	64	18	0					
5	" Bad Debts written off ..	8	0	9					
1	" Income Tax—Schedule "A" ..	1	7	0					
25	" Depreciation ..	22	16	8					
20	" Balance—Excess of Income over Expenditure ..	—	—	—					
		<u>£1,971</u>	<u>11</u>	<u>11</u>					
1953 £	LIABILITIES	£	s.	d.					
9	Subscriptions, &c. paid in advance ..	—	—	—					
210	Harrogate Show: ..	—	—	—					
58	Amounts received for Show Stands in advance ..	—	—	—					
152	Less Expenses to date ..	—	—	—					
18	Sundry Creditors ..	75	10	8					
160	National Farmers' Union ..	161	4	0					
871	Income and Expenditure Account: ..	—	—	—					
	Surplus brought forward—1st Sept., 1953 ..	891	16	3					
	Less Deficit for the year ..	152	11	9					
20	Add Surplus for the year ..	739	4	6					
		<u>£975</u>	<u>19</u>	<u>2</u>					
1953 £	ASSETS	£	s.	d.					
230	New Office as at 1st September, 1953 ..	230	1	4					
230	Office Equipment as at 1st September, 1953 ..	228	6	2					
	Less Depreciation ..	22	16	8					
228	Library as at 1st September, 1953 ..	205	9	6					
4	Stock of Saleable Literature ..	4	3	2					
100	Cash at Bank ..	120	0	0					
408	Petty Cash in Hand ..	101	5	4					
5	Sundry Debtors ..	3	13	9					
	Less Reserve for Doubtful Debts ..	361	6	1					
255		50	0	0					
		<u>£975</u>	<u>19</u>	<u>2</u>					
		<u>£1,230</u>							

We have examined the foregoing Accounts with the books and vouchers of the Association and certify the same to be correct and in accordance therewith.
 PETERBOROUGH
 28th September, 1954
 STEVENSON, SMART & CO.
 Auditors.

The Chairman: What is the proportion? I'm not quite sure at this moment. There is a preponderance in the South and we don't try for it, but it seems to work out that way. It's been like that all the time as far as I know.

Mr. Baker: I have in mind the question of Area Committees with representatives forming the Executive, and I hope one day that will come about. In the management, we have Mr. Middlebrook's point in mind.

Mr. R. L. Edwards: I have thought for some time that it is quite unsuitable that about 30 members of an Association with a growers' membership of 200 should elect a Committee simply because they can afford the time and money to come to the annual meeting. I think everyone who is a member should have a vote, whether he can come or not, and it can be elected by postal vote. The mere fact that a grower cannot come from Scotland to Tunbridge Wells, disenfranchises him. Later he suggested that a postal vote might be the answer.

Mr. Bleazard: One point arises. We have 500 grower members. At present, at this meeting, we have about 50. They are enthusiastic people and they also know the enthusiastic people on the Committee. If the Committee is to be elected by 500 people who never attend and don't know anybody there, the elections will be done like filling in football pools, and it may not be to the advantage of the Association.

Mr. Middlebrook: It appears to be that, almost, perhaps, 90% growers are Southerners—South of London. I am not criticising that. What we want to know is why, when we have such a heavy Southern Committee, we have such a poor Southern attendance at meetings of this sort. I think somehow or other something has gone wrong. We should get the Southerners to our meeting. Is this because of this heavily weighted Southern Committee?

The Chairman: I don't think whatever rule we had we could get them. It ought to be possible to have some sort of rule and have one from Ireland, one from Scotland, three or four North of a certain point, and the rest from the South. Most of the mushrooms are grown in the South and that part of the Committee would have the majority of the votes. We have tried, you know. We have a Scottish member but we really can't get an Irish member and it is difficult to get a Scottish member. It is quite a burden to come down South to a meeting. I think, I don't know personally, that if one was to look into the nominations we have no Committee Nominations from the North. That's probably why we get a preponderance of Committee members from the South.

Mr. Middlebrook: Why can't you get Southerners to attend meetings? What's gone wrong? This has been the trouble since we started the organisation. They have only to come 10 or 20 miles and you don't get them here.

The Chairman: I can't tell you the answer; can anyone?

Mr. Fred. C. Atkins: We never have many more than about this number of growers. I think this is probably the best annual meeting

we have had. Annual meetings fail to excite the average grower. I don't think this is lamentable at all; this is rather a good show. When we go North we get fewer people than this.

Mr. H. J. Barton: Is it not possible that if we could merge both these days as one we may get a better attendance?

Mr. Stewart-Wood: It would appear that two days is quite a long time for people to be away from their farms. They might have more enthusiasm in coming to the meetings when they could crowd it into one day. I think enthusiasm would be greater if it was all in one day. There were some people here yesterday who are not here to-day. They came to the Show yesterday and I have been looking round for them to-day. I don't know if they will turn up to the luncheon. They are definitely not in the room this morning. Maybe that has something to do with it.

Mr. Atkins: I think it would be a good thing for the Committee seriously to consider whether the Committee should divorce the annual meeting from the Trade Show. We tried at Harrogate; we have done it to-day. Then this difficulty arises. It means two or three days away. I would rather it were one day twice a year than three days at one time.

Mr. N. R. Cooper: It has been suggested that members should attend these meetings and we should get to know them. I don't feel this is an opportunity—an ideal opportunity—to make proper contact with members. I don't feel that if the luncheon and general meeting are held on the one day and divorced entirely from the Trade Show that we shall be able to make the same actual contact with people. I think it foolish to say that people who are in their own business or in an executive position cannot spare the two or three days away in order to enjoy what is, whilst a business meeting, quite a pleasant social gathering, too.

Mr. Sampson: Following on that I think the present arrangements are probably the best. Growers do like to get away occasionally. They have one night out for the two days and I don't think people will come down to the Show alone; and it may be they won't come to the general meeting alone. I think they look forward to coming away for two days, and I don't think those two days are lost. Growers look forward to the two days in which they can have a party or get-together and I believe this arrangement of having the general meeting on the second day a much better arrangement than last year. I feel as it is at the moment is the best arrangement.

Mr. Leach: This is only the second year and it's the way to do it. Can we wait for another year before making a decision?

The Chairman: I think, unless anyone wants to put in a resolution, that it might be left to the Committee to discuss, and possibly Mr. Leach's suggestion of giving it another trial.

Mr. Clifford King: I think the present arrangement a very good one. It is my experience in the last ten years in dealing with the NFU, as well as the MGA, that the members will come along when in trouble

and they storm their demands, but very much prefer to leave all the finer points of running the organisation to the members elected to the Committee. Some are quite willing to subscribe yearly and whilst everything is running smoothly they are satisfied. I don't feel, myself, any arrangement other than the one at the moment will have any benefit at all.

The Chairman: Will those signify who are in favour of leaving things as they are, with the possibility of splitting the annual general meeting and the Brains Trust to another day; leaving things as they are for a two-days' Show?

This was carried: One vote being cast against the suggestion.

Mr. Bleazard: Would you allow the public in at the next Trade Show?

The Chairman: This really arose from a suggestion. We asked the trade exhibitors if they had any suggestions to make after the last Show and a certain number wanted the public to have an opportunity of seeing their displays, and we said, 'All right, you can.'

Mr. Atkins: The whole of Tunbridge Wells seems to be milling around the hall and here we are discussing what we are to do next year. Is there anybody on the stand? What are we doing with the public we have got in the hall?

The Chairman: If anything goes wrong we hope to be able to correct it another year.

SPAWN CONTRIBUTION TO PUBLICITY

Mr. Geo. Allen: I would like to know if we are going to get any sense from members as to what their views are on what we have done and whether they are going to support the Publicity Scheme.

The Chairman: That has been a knotty problem and it's going on. It's alive, but not in the form which we really wanted. The whole point of the scheme, originally, was that people would be forced to contribute according to the mushrooms they grow and market. That was not possible and we did the next best. I would be very interested whether you here are willing to contribute to the Spawn Scheme.

Mr. R. Duthy: Can we have the names of those supporting the scheme?

The Chairman: Messrs. Mount (J. E. R. Simons), Pinkerton, Sampson, R. C. Darlington and Geo. Monro.*

Mr. Middlebrook: Although some may not contribute to the scheme you are not asking me to stop buying spawn which may be the best? I would buy the best spawn I could.

Mr. Allen: Supposing your spawn grower is not in the scheme, do you want to support this scheme? Send your merchant more money and ask him to pass it on. By not buying from those in the scheme are you going to evade the publicity scheme? Are you people going to stick to us, plus the spawn makers, or are you going to avoid any contribution to publicity?

**We are pleased to record that Messrs. W. Darlington & Sons Ltd. have agreed to participate.—Editor.*

3rd ANNUAL MUSH COM INDUSTRY EXHIBITION



Mr. Middlebrook: I would not consider it unless I knew everyone was doing the same, no more than would I give a flat subscription. I know it would not be on a *pro rata* basis.

Dr. Edwards: Assuming a number of growers are in favour of giving some money for the publicity, the move is to get everyone to do it. Apparently one firm has not been persuaded by the Committee to agree to take part in the scheme, but there is the possibility, which I think Mr. Allen indicated, they might be persuaded by their customers, if a number of customers of that firm, said they wished to continue to be customers, but would very much rather the firm took part. It might be a better way of persuading them where the Committee's efforts have not been successful. There is no choice or pressure to buy spawn from one merchant or another. Obviously a 1d. is nothing compared with the importance of getting the right spawn. Customers writing to the spawn makers concerned may influence them more than the efforts of the Committee. Mr. Allen has put forward the idea 'Will those people who buy their spawn from the one excluded from the scheme, by so doing avoid all publicity contributions, or are they going to ask their spawn maker to take their money and pass it on as has been suggested.' Otherwise you are going to get a small percentage of the community paying their subscriptions—it is voluntary—and some getting away Scot free because they don't want to consider it.

Mr. Barton: What objections have the firm?

The Chairman: I can't really tell you. We have had a long letter and if I was to try to explain it to you I don't think I would get it right. There are a lot of objections, but I don't think we have come to the end; we hope they will still come in. I quite understand some of the objections; others I don't. I would like to see them in. I think they might come in, but a little bit of pressure could be brought from their customers.

Mr. Clifford King: I think that is the wrong word, 'pressure.' That is a thing we must avoid at all times. We may try to persuade them, but I don't think anyone would say it would be practicable to use pressure, and I would not like the firm to get the feeling that pressure might be brought to bear. I don't know of anyone who would want to re-arrange our spawn suppliers. We have confidence in them and it would be much better to let this rest a little longer and hope they will re-consider their views.

The Chairman: Perhaps 'pressure' was the wrong word. If I was dealing with them I might say 'I don't want to be out of the scheme; I enclose a cheque and will you please see it goes on.' I would like to see them taking an active part and doing something, but I'm not going to push it. That is not to be compulsory.

Mr. Middlebrook: Would it help if you had from this meeting a short resolution to back you up? So far you have been working as a Committee. If you had the sanction of the whole organisation would that help you? If you knew every member wanted the spawn levy and it is the only way to get the last firm in; would it influence them at all if they knew you had the Association behind you?

The Chairman: We would be glad to know you approve of what we have been doing. We have had to work hard and it is not easy. We have not got what you said you wanted or what we wanted ourselves, but we just can't do that. We had to compromise and that is why we have got where we have. We would be glad of a resolution in support of what we have done.

Mr. Clifford King: I think that is a good idea. I would make one suggestion. A number of people who are interested in this scheme working have signed our names to it. Let those go to the person who at the moment is not interested and he can see what his various customers think. I think that is a better idea than bringing pressure to bear; it would be done in a diplomatic way.

Mr. Middlebrook: I propose that the members approve of this scheme for a spawn levy, agree to pay it, and would like to see the spawn makers operate it.

The Chairman: Can we get rid of the word 'levy'?

Mr. Middlebrook: Yes, 'contribution.'

One Member voted against the proposal, which was carried.

Mr. Dunbar: I represent Mr. Jenks, South West area. I have been instructed by him to note his complete disapproval to the whole scheme. The ground has been taken away from me in the meeting by the fact that the levy is voluntary. He was under the impression that it was compulsory, but he has the view that you are never going to raise sufficient money. It is not going to do any good to anybody. The Milk Marketing Board, a very large institution, raised a capital sum of £300,000 for trying to increase the sale of milk. With that amount of money available they could not sell an extra pint. What are we going to do with the small sum of money available? You can't increase the price; if you do the public won't buy. We are perhaps in a favourable position, selling round about 70% of our total output without dealing with wholesalers. We, as growers, are perfectly happy under the present circumstances. We can see no reason for publicity from the MGA. What are we going to publicise? Will the growers get a better price? What are we trying to do?



They're at it again! Mr. G. V. Allen of Bilting, Kent, and Mr. Stanley Middlebrook of Selby, Yorks., the former a tray system grower and the latter favouring shelves, discuss the merits of each system. In the foreground is the model farm made by Mr. Allen and, naturally enough, the model is of a tray system farm.

The Chairman: We want to stabilise the price of mushrooms. If we can increase it a little, yes. Production is increasing all the time. I don't think, personally, there is any comparison between milk or tomatoes. I think we have really got something and in my experience an increasing number of the public are taking mushrooms for the first time and once they get their teeth into them they are going to have them. We have got a big market and we want that little bit of publicity here and there. We cannot have an enormous scheme when we have got but very little money, but we can do quite a nice little bit of publicity.

Mr. Dunbar: As a reasonably small grower in South West England there is a demand from people as far as Sheffield who want to buy mushrooms. What publicity is necessary? Any wholesaler in the country can do with more. My experience goes back 25 years. Why the publicity is something we cannot understand. We had two men on our place this week trying to buy mushrooms, from considerable distances away. It won't make us sell any more.

The Chairman: I don't think many growers are in such a favourable position. The majority have to go to the wholesale market. I am not a publicity expert, but I have been in the trade for 25 years and I have seen its ups and downs. It has not been so bad lately. I don't think prices will go up, but I don't want to see them get lower.

Mr. Dunbar: My employer has a publicity campaign of his own; and it's done very well.

The Chairman: If he has got good publicity we want to do the same. It may not suit him but the general urge from the members last year was to see definitely that the Committee did something about publicity, and that we have started on. We have not got very far; we have a lot to do to get on with it. Those are our orders from the members. I don't think we could have done anything else.

Dr. Edwards: Wholesalers are trying to get more mushrooms because wholesalers, selling on commission, are making money out of selling as many as possible, whether or not the grower is producing at a profit. It doesn't matter two hoots to them. They are still getting their commission whether the grower is working on a margin or working at a loss as he may do in the summer. The fact that the wholesaler's agent is asking for more is no direct evidence the public wants them. That's a fallacy. I don't think, personally, there is any chance of the price going up but there are many people who are starting to grow, and a very large number of existing growers are anticipating yields generally going up. There is no doubt about it; production is going up and somehow or other we have got to sell more per year. If we don't the price is going down. The object of the Publicity Committee is to sell more mushrooms at the same price and to prevent it falling by expanding the market as production expands.

Mr. Allen: The South Western growers are living in a 'Fool's Paradise.' You have your satisfactory price but you have to remember the increased production in the last 25 years, and how the actual rate of profit has decreased. Look ahead to another 25 years. You may not be in business, but your sons may be. If we are not to increase the price we have to supply the mushrooms and get more people to have them at that price to retain our profit. What's the good of saying, 'Everything is all right to-day'—tomorrow is very close. You have demands to-day but in five years you may not. We are trying to protect people who, when there are more mushrooms, can still make a living out of it. I'm looking 10 years ahead and I think that is the basis of the whole scheme. (Cries of Hear, hear).

Mr. Thompson: In Tunbridge Wells the consumption of mushrooms has been running at 300 lb. per week. Recently there has been a certain amount of publicity and this week the consumption has been running at over 3,000 lb. I think that shows what can be done. The publicity we have had in the past has been extremely limited. We had no money at all, or virtually none, and you cannot do very much publicity without money. We have been given stands at three Shows and I think they have been fairly effective. Before we can achieve very much we have got to have professional aid, advice on how to spend the money we are going to get, and how to get the best effect from our publicity. About a month ago we had less than £100 which was spent on publicity. Now we have prospects of perhaps £2,000, perhaps even £3,000. The Spawn Contribution Scheme is only part of the money that's coming in. Stable Manures have given us 1d. per yard; that's going to mean something like £150 or £200 per year, and I hope that other manure factors will come in. Some of the large market wholesalers have been approached. Some have agreed to ¼d. per chip out of their own pockets, and two people who did not want to contribute in that way have given us a cheque for £100 and another has promised a cheque for £70. I think people are already doing their bit to help publicity. That will give us a reasonable fund to spend on publicity. There is a point in connection with the £300,000 spent by the Milk Marketing Board. It sounds a large figure but if we spend that on display advertisements we could blow £2,000 on a half-page in the *Radio Times*: that would not go very far. There is something new, worthy and exciting in mushrooms and we can get, if expertly done, tremendous editorial publicity in keeping the mushroom in the public eye. That is possibly where the money should, originally, be spent. Another thing is that we must get mushrooms put on in all the cookery demonstrations, or as many as we can. If we can get them to cook mushrooms that is going to have a tremendous effect. There are quite a lot of things we can do like that. Representation at Shows is valuable. I was at the Food Fair for several days. The Essex and Kent Farmers' Unions had a stand there and I saw a stampede there at one stage on the third day of people wishing to buy at their stand. Mushrooms ran out as fast as we could put them up. We hid them most of the time otherwise they would have sold immediately. Five people were going flat out selling tomatoes and there were queues of

people wanting to take them. I think Shows are good; people came back at the Food Fair and said, 'I had one of your leaflets at the Royal Show, can I have some for my friends?' All that helps to preach mushrooms and will have the effect of helping to stabilise the price paid throughout the year. It is not much good getting about 6/- in October and having it on the floor in January, a bad month. Publicity can do a great deal to even out the price over the year.

The Chairman: I hope that tells you what you want. We don't visualise blowing our money in, say, five months; we are going to feel our way. One question, 'What are you going to do with the money?' I can't tell you until I know how much we have got to play with. Well, if you won't tell me what you want to do, we must do what we can. If we have your confidence, that's all we ask for.

Mr. Leach: Can I ask for a vote of thanks to the Chairman and all who have had anything to do with the Show, including the ladies and the Executive Committee; also, in particular, the Chairman of the Publicity Committee: for the invaluable work and terrific time they have given during the year which has kept them away from their farms to do all the good work they have done. I think I am expressing the opinion of everybody here. They have done valuable work during the year for everybody. They may not have been able to do everything we suggested they should have done, but I think we may express our views by giving them a hearty vote of thanks.

The Chairman: Thank you on behalf of those concerned for those kind words.

ANNUAL LUNCH

Record Gathering

The annual luncheon, held in the Elizabethan Barn, was attended by nearly 150 people—a record attendance.

Capt. G. P. Lawrence, MGA Chairman, presided, and the Guest of Honour was Mr. Eric Gardener, Chairman of the NFU Central Horticultural Committee, and a long and valued friend of the Association.

The guests included Mrs. Lawrence, the Mayor and Mayoress of Tunbridge Wells (Ald. and Mrs. McNab) and others, and the appearance of Miss Anne Cullen ("Carol Grey" of "The Archers") added interest to the occasion.

After lunch, Capt. Lawrence introduced Mr. Gardener who pre-faced his speech by saying that, as a native of Kent, it gave him particular pleasure to pay a visit to the county whenever the opportunity offered. He went on:—

“You are one of the best Societies within the NFU and I am certain you have every right to be as proud of your organisation as we in the NFU are pleased to have you associated with us. I know of no other group of growers who have worked so hard since the war to make a success of their organisation as you have. I know how much you have provided to ensure that very important work on research is adequately carried on. I know that you have been greatly disappointed that your own Research Station has had to be transferred to the new Glasshouse Research Station in Sussex. It’s a thought, to take comfort in, that, as a result of your enthusiasm and the financial support to that Research Station, the Government were persuaded that this was something that could only be done, and should be done, by public funds. You can look forward to the future with confidence in the certain knowledge that research will be carried on.

I have been asked to say something in particular on the General Agreement on Tariffs and Trade—GATT—which is having, and is still going to have, such a very great affect on the whole of our industry, not only on mushrooms but agriculture and horticulture. This is a general agreement which was signed in 1947, and its two main applications are the effective control of imports and tariffs and protective measures of that kind. The horticultural side of the Union, when this came into being, realised the ultimate dangers to horticulture as a whole, and, therefore, we started preparing a case which would enable us to get a necessary measure of control for imports. To a certain extent we were successful, but our job was made very much worse by the extraordinary contrariness of Government actions.

You see, in 1932, we had signed an agreement with the Commonwealth or the Empire countries at Ottawa. By that we said we would not put up duties at all on goods coming from Commonwealth countries. We had terms of one kind not to put up duties to Commonwealth countries, but under GATT the terms put them up against everyone, including the Commonwealth. We were on the horns of a dilemma, but we managed to get over that problem.

As far as mushrooms are concerned they had been regulated by an agreement of 1947, and we as a country had agreed not to put the duty up. Mushrooms were eventually put on a non-specific duty so we had, in view of altered money values, problems to get over. We were bound by the Ottawa Agreement not to put any higher duty on mushrooms without so doing on those coming from Commonwealth countries. This placed Ireland in the problem: the Irish have a remarkable way of getting the best out of both worlds! When, in 1949, they came out of the Commonwealth they argued a new agreement out of this country. The first clause reads: That that part of Ireland which declared itself an Independent Republic is no longer part of the Dominions, but it is not

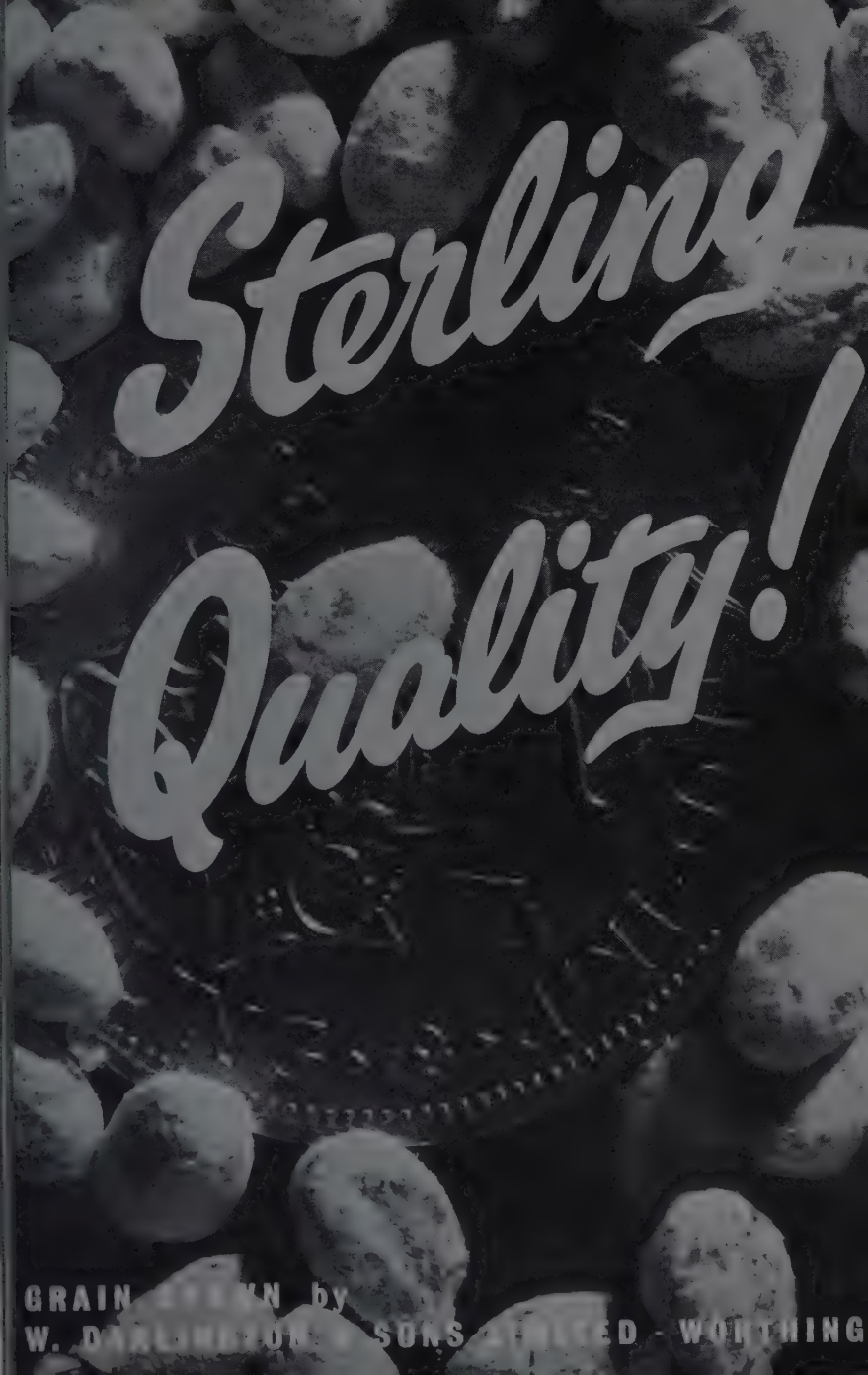
a foreign country. That means that although they came out of the Commonwealth altogether as far as ordinary duties are concerned, the Act of 1932 is still in force and we are prevented from putting up the duties on any products coming from Ireland without breaking the Ottawa Agreement of 1932. If we break it we are breaking it with every other Commonwealth country. That is the problem affecting you as mushroom growers.

I want to make it quite clear that I would be wrong and misleading you if I thought there was a likelihood of getting over that problem in the very near future. You are only concerned with mushrooms, but the Agreement made in 1932 affects you just as much as other sides of agriculture and horticulture. The whole of the Union is concerned with this problem and with all the problems this Agreement on Tariffs and Trade has brought up. We have not got them where we wanted them to be because of the Agreement of 1947 with other countries and because of the Ottawa Agreement, but I can assure you they are having our constant attention all the time.

It has been my particular job to be concerned with imports since the war and my job to be concerned with GATT in all its aspects. Nothing has received greater long-time discussion in the Councils of the Union than this particular matter of General Agreement on Tariffs and Trade. In its implications and ultimate possibilities the problems are as serious as a whole as for any one single side of horticulture, possibly more serious than any we have had to overcome.

If we can't get our duties put right you have got to face the fact that Irish mushrooms are going to come in and they will have some effect. A report by the Ministry completed in the last three months gave an idea of how mushrooms from Eire were having an effect on your sales. Take comfort from the fact that the better quality of your own mushrooms, as against those imported, defied that competition in towns further away from the coast. There is no doubt about it. It's getting a better price because it is a better product.

I suppose any discussion in horticulture or the farming community is on publicity as well as on the extraordinarily attractive product you grow. Three-quarters of a pound per head of the population is a mere nothing, far, far less than tomatoes, which were first seen less than 100 years ago in Covent Garden by wholesalers and they said 'There will be no future for this project.' Think of the tomato industry to-day! I'm certain the same effort can apply to mushrooms. Your organisation, which has been associated with us in the growing and selling and in the marketing of produce, was associated with definite efforts this year. At Windsor we were glad to have you with us in the Show Society's display when the Queen, and the Duke and Duchess of Gloucester and the Princess Royal came round, and you have been recently at the Food Fair at Olympia associated with that magnificent effort which the Essex and Kent horticultural branches of the Union put up. You have been associated, too, in other practical publicity efforts this year. These are, if you like, small beginnings, but they require



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a great deal of work, as Mr. Haynes and I know only too well. However, they are examples of what can be done in the realm of publicity. If you can establish by one method or another—I leave to you the method you choose—satisfactory means of collecting together funds and enthusiasm which you need for publicity, I'm certain of one thing, there is no end to the opportunities which can grow from it.

You can rely on the full support of the NFU in all the activities you undertake. We admire and appreciate the great enthusiasm with which you undertake these activities. We wish you well for the future in the certain knowledge you will do well.

RETAILERS' DISPLAY COMPETITION

By Mrs. LAWRENCE and Mrs. ALLEN (Judges)

We had the great pleasure of judging the Retailers' Display Competition at Tunbridge Wells.

There were three entries in Tonbridge, one in Southborough, and nine in Tunbridge Wells. We were very much impressed by the friendly co-operation and enthusiasm of the competitors. In every case they told us that they had sold, in two and a half days, as much as and in several cases more than they usually sold in a week. The reduced price, no doubt, had something to do with the increased demand, but the general opinion was that it was largely due to the interest of the public in "Mushroom Week."

The exhibits were generally of a high standard, varied and ingenious, and a great deal of trouble had been taken. We found it difficult to arrive at a decision.

The First Prize was awarded to Mr. Gibbs of Tunbridge Wells. His exhibit consisted of five dishes of mushrooms, which were simply but extremely well cooked and attractively dished up. In addition to this he showed chips of mushrooms with clearly marked price tickets, and a poster advertising the Show. His shop window had been flood-lit at night and had attracted a great deal of attention.

The Second Prize went to Messrs. Rayswell, also of Tunbridge Wells, who had devoted an entire window to all sorts of mushroom products. This exhibit was an example of perfect window dressing.

Amongst other exhibits we should like to mention one in particular which was in three divisions marked "Yesterday," showing mushrooms growing in a box, "To-day" in chips and "To-morrow"—a tray set out with knife, fork and plate on which were a fried egg, bacon and mushrooms.

We should like to compliment and thank all the competitors who entered and suggest to the MGA that this successful innovation be repeated.

F. M. LAWRENCE
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RECORD COMPETITION ENTRIES

The figure of over ninety class entries for the competitions, representing some 300 lb. of mushrooms, resulted in the keenest possible competition and the two judges, Mr. Percy Izzard of the "Daily Mail" and Mr. D. W. Ravenhill (Messrs. T. J. Poupart Ltd.) found the task of making the final awards most difficult and were occupied for about two hours.

The mushrooms were displayed to advantage on the spacious stage which had been tastefully decorated with flowers by Mrs. Lawrence, wife of the MGA Chairman.

Mrs. Baker, Mrs. Jones and Mrs. Allen all worked unceasingly with the show sub-committee to arrange and organise this large entry.



The two competition judges at Tunbridge Wells, Mr. Percy Izzard (left) of the "Daily Mail" and Mr. D. W. Ravenhill (right) a director of the well-known Covent Garden firm of Messrs. T. J. Poupart Ltd., weigh up the finer points of one of the entries in the MGA Challenge Cup class.

MGA Challenge Cup, open to MGA members only, for best three chips of white buttons:—1, E. A. Gook, Faversham; 2, J. E. Ady, Cranleigh; 3, Pembroke Mushroom Farm, Walmer, Kent.

The Mount Cup (open) for best chip white buttons:—1, J. R. Oldfield, Doddington Place, Nr. Sittingbourne; 2, Pembroke Mushroom Farm, Walmer; 3, R. J. Hopkins, Hammer Lane, Vine's Cross, Horam.

The Thwaites Cup (open) for best two chips, one white buttons, one white cups:—1, J. E. Ady, Cranleigh; 2, S. A. F. Sampson, Oving; 3, Pembroke Mushroom Farm (E. Mount).

The T. J. Poupart Cup (open) for best six chips, two white buttons, two white cups and two white opens:—1, Broadham Produce Co. Ltd., Oxted; 2, J. E. Ady; 3, Gordon Smith, Linton.

The Stable Manures Cup (open to growers with under 10,000 sq. ft.):—1, Guy Reed, Woking; 2, F. R. Knight, Eastbourne; 3, R. S. Francis, Tonbridge.

Class 6, one chip white cups:—1, S. A. F. Sampson; 2, Fort Darland Mushrooms Ltd., Gillingham; 3, E. A. Gook.

Class 7, one chip white open:—1, Broadham Produce Co. Ltd.; 2, Fort Darland Mushrooms Ltd.; 3, G. V. Allen, Ashford.

MATTHEW PINKERTON'S PRODUCTION

Fred. Atkins Asks Some Questions

Matthew Pinkerton and I have been friends for some years now and I felt it my duty, when he made his customary call on me on his way home from Tunbridge Wells, to cross-examine him about his widely-publicised production. Presumptuous? If you like; but many MGA members had expressed to me their fears of his ambition to equal the output of the rest of Great Britain in his Scottish mines and I felt he would wish to know of those feelings.

Matthew's reply was immediate. "Any anxiety over my present output of five tons daily, or over potential production when my other mines are brought into action, is completely unfounded," he told me.

I have no reason to doubt his word. He has always "kept me in the picture" concerning his activities. He came to see me before he bought those mines, and showed me his plans. I was informed of his first canning factory before it was built, and I know that he is now completing his large new cannery. I was aware of his activities in London before and after the Tunbridge Wells occasions, and his first words when we met the following week were of his three big contracts with London firms specialising in the export of canned foods.

"I am building up my mushroom products businesses **for export only**," he assured me. "The British growers have nothing to fear at all that I shall flood the markets with fresh mushrooms. I shall send no more to the wholesale vegetable markets after 18th October. All my crops will then go abroad as canned mushrooms or in cans of steak-and-sliced-mushrooms."

Then was he disinterested in the MGA publicity plans, I asked.

"Far from it," he replied. "Don't forget I have a spawn business too! I have heard from Mr. Walter Maule of their experiences in Kennett Square, and I can assure you it does pay to advertise. **I back the present MGA Publicity Scheme all the way.** I am a strong supporter of it."

He asked me to pass on a word of warning. "The biggest danger to the British Mushroom Industry is *still* the resistant Phorid fly. Ask the Sussex growers. And then get some research on it done at Littlehampton."

SMALL ADVERTISEMENTS (3d. a word)

(Continued back cover)

MUSHROOM TRAYS: reconditioned *ex* Fish. Standard size; large or small quantities: prompt delivery. Competitive prices. **HORTICULTURAL BOX SUPPLIER**, 12 Rolls Street, Battersea, London.

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TRADE EXHIBITS

Space taken by the trade exhibitors in the well appointed Assembly Hall, at Tunbridge Wells, came up to all expectations and reports so far received from individual exhibitors indicate that they were well pleased.

To the general regret an effort this year to encourage market salesmen to take space and to take advantage of this opportunity to meet growers was not at all successful and only one firm, Messrs. J. Wood & Sons, of Kirkgate Market, Leeds, and other Northern markets, had a stand, although many other firms had representatives moving around in the Exhibition.

Among those showing baskets and market packs in general were: Messrs. The Atlas Basket Co. Ltd., from Harpenden, Herts.; Messrs. The British Basket and Bestos Co. Ltd., from Cuxton, Rochester, and Messrs. F. Gough & Son Ltd., of Fishergate, Norwich.

The Spawn Makers and Sundriesmen in general as usual, gave this annual effort their full support and, as always, showed their wares to much advantage. They were:—Messrs. R. C. Darlington Ltd., of Hastingwood, Harlow, Essex; Messrs. W. Darlington & Sons Ltd., of Southcourt Road, Worthing; Messrs. Geo. Monro Ltd., of Hertford Road, Waltham Cross; Messrs. Pinkerton's Scottish Mushroom Laboratories, of Millerston, Glasgow; Mr. S. A. F. Sampson, of Oving, Chichester; and Messrs. J. E. R. Simons Ltd., of Harlow, Essex. Messrs. The Farmers' and Growers' Industries Ltd., of Worthing, were associated with the R. C. Darlington Stand.

Activators came even more into the picture with the displays of Messrs. The Bradford Fertiliser Co. Ltd., of Bradford, Yorks., and Messrs. Brantom, Shirley & Co. Ltd., of Battersea, London, S.W.11. Messrs. Thomas Elliott Ltd., of New Church Road, London, S.E.5, displayed their wares to full advantage across the entire width of the hall against the stage and there were many enquirers from friends old and new. The corner stand was occupied by Messrs. The Eclipse Peat Co. Ltd., of Ashcott, Somerset.

Messrs. Stable Manures Ltd. overcome any difficulty with their special product with a neat show of growing mushrooms and a model lorry, whilst on the lighter equipment side Messrs. Perkins (Clean Milk Equipment) Ltd., of Mansfield Road, Derby, displayed, among other things, their steam and electric boilers. Messrs. H. D. Steele & Son Ltd., of Worthing, disappointed at not being able to display their large manure turner, showed, instead, a model of this machine together with the Junior turner whilst, opposite in the Foyer, Messrs. Simons had their favoured Comporoto. Away in the Annexe, Messrs. Culverwell Ltd., of Malling Works, Lewes, showed their manure turners to much advantage. There was, in addition, a stand by "The Nurseryman and Seedsmen," always good friends of the MGA; the Mushroom Research Association went to considerable lengths with their black back-clothed stand, whilst the MGA stand also attracted attention.

A cookery demonstration, a never-failing attraction to housewives, was put on by the South Eastern Gas Board.

AN AMERICAN GROWER'S DIARY

By JOSEPH M. MICHAELS, Naperville, Illinois

1st September

The Chicago mushroom growing region is limestone country. Geologists tell us that this is the bed of the Silurian Sea. Powdered limestone is plentiful—and this grower has been using it abundantly in “sweetening” casing soil. It is impossible to raise the pH above 8 regardless of the quantity of limestone used. (I am not referring to hydrated lime.) I have used it unsparingly, and we have never been troubled with green moulds. To-day I am perplexed. I have just received a chemical analysis of our limestone, and it tells me that it is composed of 53.5% calcium carbonate, 43.5% MAGNESIUM carbonate and 3% aluminum, iron, and silicon. The magnesium quantity bothers me. That magnesium is toxic to the formation of rhizomorphs in the casing soil is fairly accepted. I am wondering what reduction in yields we growers in this area have suffered from this factor. How naively we have introduced chemical injury into our soil! Now I know that dolomitic limestone means magnesium limestone. So this grower is about looking for a new limestone—the calcium kind.

Acids and limestone yield carbon dioxide gas. I am wondering if the carbon dioxide that our mushroom beds give out is not largely produced that way.

3rd September

Our manure comes from race tracks and riding stables and is delivered in trucks by manure dealers. These same trucks deliver spent mushroom compost to gardeners. Much of this used compost is laden with “Mat” and truffle spores. We can Sterilize an empty house and raise air temperatures to 200° F. with corn drying equipment and kill Mat and truffle spores. How futile this is when we return the spores to the house in the fresh manure. The “sweat out” temperatures are not fungicidal. The Gods of Pathogenic Fungi surely must love the manure dealers.

5th September

This evening I have worked some more on the plans for our new tray houses. I cannot accept Stanley Middlebrook's description of trays. He says that they are “messy, and untidy, and inefficient.” How “messy and untidy” a conventional bed house is when the manure is just emptied! Each board must be lifted individually and cleaned, and the crosspieces under the boards must be cleaned. Then the beds are remade so that the house can be sprayed and fumigated. After fumigation the beds are torn down again and the boards individually stacked because we fill starting at the bottom. And, let's not forget that these beds are remade once more as they are being filled. The steaming wet manure coming in to fill this claustrophobic space does not make things exactly neat, and tidy, and nice.

8th September

I am thinking of incorporating glassbrick into the walls to admit daylight into our new tray houses. I fail to see why mushroom growers should work in Stygian darkness. The matter of total dark or daylight in a growing room might condition the life cycles of the pests that accumulate. Tropisms in nature are related to reproduction and survival. The duration of daylight for example initiates the flowering of chrysanthemums. Perhaps mites and springtails might not reproduce profusely if a tropism is upset. Is light important or is light not important in the ecological development of life in a mushroom house. I think that the British grower is fortunate indeed because he has the Mushroom Research Association. They could find the answer to such a question.

9th September

The present mushroom prices for 1st grade mushrooms on the Chicago market are 60 to 65 cents per pound. These prices are about the same as they have been all winter and spring.

12th September

Our first break of mushrooms should mature to be picked a week from to-day on Sunday, 19th September. It seems that our heaviest breaks are invariably ready on Sundays and Holidays. I am convinced that mushrooms grow best on those days.

TUNBRIDGE WELLS COMPETITIONS

By D. W. RAVENHILL (one of the Judges)*

In a letter to the Secretary, Mr. Ravenhill writes:—

Generally speaking I found that the standard set by the numerous competitors was very high, and a very fine advertisement for your produce. With the exception of Class 4, it was by no means an easy matter to select the exhibitor's produce worthy of the prize offered. In some cases my colleague Mr. Izzard and I were obliged to reach our decision by weighing each competitor's exhibit, and we gave the prize to the basket or baskets showing a correct weight to the nearest ounce. It seemed to me a great pity that a standard chip was not used, because if the correct weight and the correct packing are maintained, then a standard chip should appear to be completely filled with mushrooms, whereas in some cases I noticed that the chips appeared to be "slack" for the simple reason that the chip was taller than the others and must have been of a greater cubic capacity than the standard chip.

The general grading was very satisfactory in most instances, and I must say that I was very pleased to find that the variation in grading between the top layer and the bottom was negligible, with a few exceptions, although in most instances we removed sufficient mushrooms to see the bottom layer, and therefore we were in a position to say that the grading had been very fair. I think that it should be made clear another year to the competitors that in certain classes where you state that the mushrooms should be exhibited "as packed for market," that this term means that it should be a normal market pack as the salesman expects to find it. In most instances this was adhered to, but

in one or two cases I noticed that the grower had spoilt a very good mushroom by packing it in a fancy method, which of course one does not expect to see in the market, and it is not regarded as a commercial pack.

I would also suggest that it would be helpful to the judges if you arranged your schedule of judging so that you allocated a certain number of points for certain qualifications, i.e., 5 points for grading, 3 points for condition, and so on. This is usual when one is judging apples, pears, etc., and it is helpful to the judges. It also gives us a guide as to the amount of importance you attach to the various points on which we are judging. Personally I am all for including the point "as packed for market" in as many cases as possible, for obvious reasons. However, I do appreciate that in the smaller classes this is not feasible.

In conclusion I would like to add that I personally thoroughly enjoyed the job which you gave me to do. I only hope that my colleague and I carried out our task to your satisfaction. I would, however, like to make the observation that if every competitor who had originally entered this Show had been able to produce mushrooms on that date, it would have been a very difficult task for the two of us to have carried out in a matter of two hours. I would therefore suggest that in future, if the popularity of this competition increases, as I am sure it will do, then it will require at least four judges to tackle the job efficiently and in reasonable time.

I sincerely hope that these few observations will be of some assistance to you, and I gather that my colleague Mr. Izzard has already given a few suggestions to your Chairman. I would like to congratulate you and all those responsible for the display and the organising of this Show, on having achieved what I would describe as a very successful exhibition.

*Mr. Ravenhill is Managing Director of Messrs. T. T. Poupart Ltd., the well-known Market Salesmen.

CAPT. LAWRENCE AGAIN CHAIRMAN

At a meeting of the Executive Committee following the Tunbridge Wells Exhibition and Annual General Meeting, Capt. G. P. Lawrence was unanimously re-elected MGA Chairman for the second year in succession, on the proposition of Mr. G. W. Baker, seconded by Mr. J. Stewart-Wood. Mr. Baker was also unanimously re-elected Vice-Chairman.

The complete committee now reads:—Capt. Lawrence, Messrs. G. W. Baker, G. V. Allen, F. C. Atkins, F. Bleazard, N. R. Cooper, F. L. Filmer, E. G. Gook, W. A. B. Harding, A. G. Pointing, Guy Reed, J. Stewart-Wood, and Raymond Thompson. There are still two vacancies to be filled by co-option.

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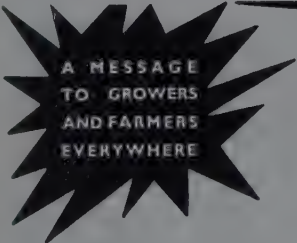
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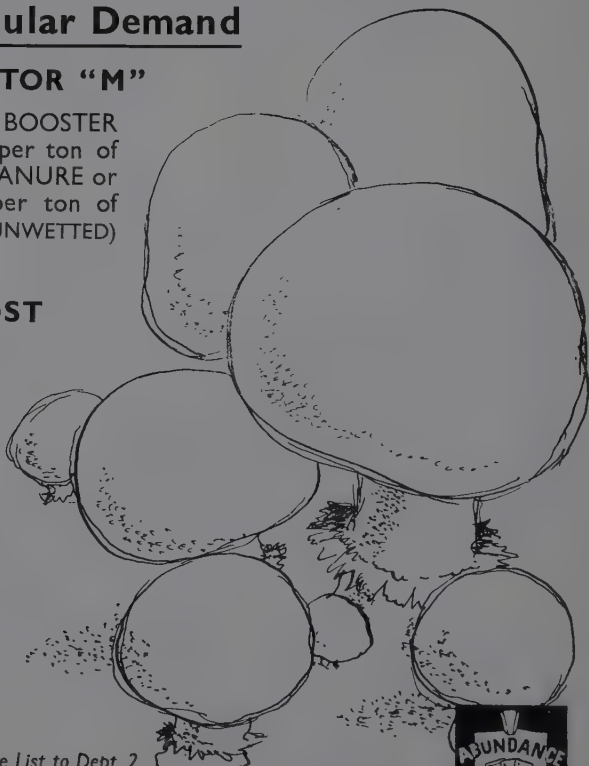
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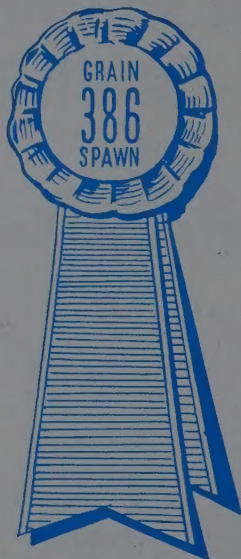
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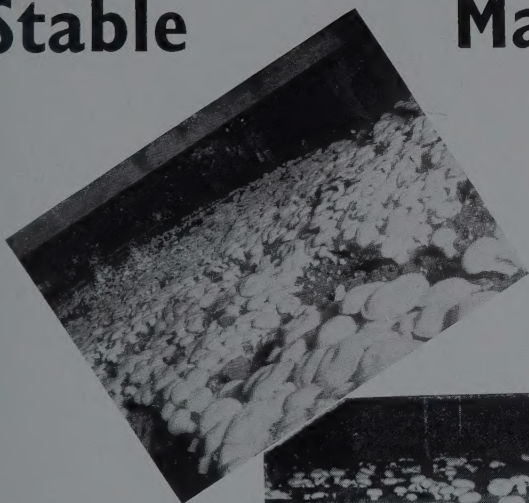
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PLASTIC HOSE. $\frac{1}{2}$ " 5 $\frac{1}{2}$ d. ft., $\frac{3}{4}$ " 8 $\frac{1}{2}$ d. ft., $\frac{1}{2}$ " 9 $\frac{1}{2}$ d. ft., 1" 1/3 $\frac{1}{2}$ d. ft. 60 ft. lengths and multiples.

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